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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,991	03/24/2005	Susumu Murata	123216	6386

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EXAMINER

MARINI, MATTHEW G

ART UNIT PAPER NUMBER

2854

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/528,991

Applicant(s)

MURATA ET AL.

Examiner

Matthew G. Marini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15-20, 22, and 24-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Furuya (2002/0094222).

As to Claim 15, Furuya teaches in Fig. 1 a tape-like object feeding device, 200, for feeding a tape-like object, 210, comprising: a feeding mechanism, 220, that feeds, paragraph 94, line 7-11, the tape-like object, 210, toward an outlet, 110; a cutting mechanism, 300 and 400, that cuts the tape-like object, 210, fed by the feeding mechanism, 220; an ejection roller, 500, placed on the outlet side of the cutting mechanisms, 400 and 300, for ejecting the tape-like object, 210, cut off by the cutting mechanism, 300, through the outlet, 110, by revolving while making contact, paragraph 164 lines 1-10, with the tape-like object, 210; and a controller, of Fig. 9 item 600, which controls, paragraph 180, the revolving timing of the ejection roller, 500, in the ejection of the tape-like object depending on a feeding length, paragraph 184, of the tape-like object, by the feeding mechanism, 220.

As to Claim 16, Furuya teaches a tape-like object-feeding device in Fig. 1 item 200 where in Fig. 4 a driver, 145, for driving the feeding mechanism, 220, and a driver,

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330, for driving the ejection roller, 500, are provided separately and independently, paragraph 179, lines 8-14.

As to Claim 17, Furuya teaches in Fig. 1 a label tape printing device, 1, for printing on a label tape, paragraph 90 lines 6-7, as the tape-like object 210, comprising: the tape-like object feeding device, 200; and an image formation unit placed, 150, on an upstream side of the cutting mechanism, 300, for forming an image on the label tape, 210.

As to Claim 18, Furuya teaches in Fig. 1, a tape-like object feeding device, 200, for feeding a tape-like object, 210, comprising: a feeding mechanism, 220, that feeds the tape-like object toward an outlet, 110; a cutting mechanism, 300, that cuts the tape-like object, 210, fed by the feeding mechanism, 220; an ejection roller, 500, placed on a downstream side of the cutting mechanism, 300, in a feeding path, 18, of the tape-like object, 210, for ejecting the tape-like object cut off by the cutting mechanism by revolving while making contact with the tape-like object, paragraph 164 lines 1-10; and a controller, of Fig. 9 item 600, which executes driving control of the ejection roller, 500, in the ejection of the tape-like object, 210, which has been cut off, paragraph 184, depending on the feeding length of the tape-like object by the feeding mechanism, 220, at a point when the tape-like object, 210, is cut off by the cutting mechanism, 300.

As to Claim 19, Furuya teaches a tape-like object-feeding device, 220, where the type of the tape-like object, 210, includes a laminate structure, paragraph 2 lines 3-6, of the tape-like object, 210.

As to Claim 20, Furuya teaches a tape-like object feeding device, 200, where the controller, 600 of Fig. 9, changes control, paragraph 179 lines 8-14, regarding revolving timing, paragraph 180, of the ejection roller, Fig. 1 item 500, depending on the feeding length of the tape-like object, 210, by the feeding mechanism, 220, at the point when the tape-like object is cut off by the cutting mechanism, 300.

As to Claim 22, Furuya teaches a tape-like object feeding device, 200, where the controller, Fig. 9 item 600 includes: a first driver, 330, that drives the ejection roller, 500; and a second driver, 145, that drives the feeding mechanism, 220, wherein the ejection roller, 500, and the feeding mechanism, 145, are controlled independently by driving the first and second drivers separately, paragraph 179 lines 8-14.

As to Claim 24, Furuya teaches a tape-like object feeding device, 200, where the controller of Fig. 9 item 600 includes a calculating system, paragraph 178, which calculates the feeding length of the tape-like object, 210 of Fig. 1, by the feeding mechanism, 220, at the point when the tape-like object is cut off by the cutting mechanism, 300, based on information on contents of printing on the tape-like object, lines 15-20 of paragraph 178.

As to Claim 25, Furuya teaches a tape-like object-feeding device, 200 of Fig. 1, further comprising a sensor, 465, for detecting the feeding length of the tape-like object, 210, by the feeding mechanism, 220, at the point when the tape-like object is cut off by the cutting mechanisms, either 400 or 300 (paragraph 187).

As to Claim 26, Furuya teaches a tape-like object feeding device, 200 of Fig. 1, where the tape-like object is a label tape, paragraph 90 lines 3-7.

As to Claim 27, Furuya teaches a printing device, of Fig. 1 item 1 comprising: a feeding mechanism, 220, that feeds a tape-like object, 210, toward an outlet, 110; a cutting mechanism, 300 or 400, that cuts the tape-like object, 210, fed by the feeding mechanism, 220; an ejection roller, 500, placed on a downstream side of the cutting mechanism, 300 or 400, in a feeding path, 18, of the tape-like object, 210, for ejecting the tape-like object cut off by the cutting mechanism, 300, by revolving while making contact with the tape-like object, paragraph 164 lines 1-10; an image formation unit, 150, placed on an upstream side of the cutting mechanism, either 300 or 400, in the feeding path, 18, for forming an image on the tape-like object, 210; and a controller, as seen in Fig. 9 item 600, which executes driving control of the ejection roller, 500, in the ejection, paragraph 164, of the tape-like object, 210, which has been cut off, depending on the feeding length, paragraph 184, of the tape-like object, 210, by the feeding mechanism, 220, at a point when the tape-like object is cut off by the cutting mechanism, 300.

As to Claim 28, Furuya teaches a printing device, Fig. 1 item 1, where the controller, of Fig. 9 item 600, executes the driving control of the ejection roller, 500 of Fig. 1, in the ejection of the tape-like object which has been cut off, paragraph 180 lines 4-9, further considering the information on size of the image generated by the image formation unit, 150, as seen in paragraph 178 lines 7-19.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furuya (2002/0094222) in view of Kano (5,855,441).

Furuya teaches all that is claimed, as discussed in the above rejection of Claim 18, except a tape-like object-feeding device further comprising a detector that detects the type of the tape-like object.

Kano teaches in Col. 4, lines 4-6, a cassette identification sensor, which identifies the type of cassette attached. It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the sensor of Kano into Furuya because it would allow the ability to store different print formats depending on the type of cassette used without user input, Fig. 2.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furuya (2002/0094222) in view of Nakagawa (5,769,411).

Furuya teaches all that is claimed, as discussed in the above rejection of Claim 18, except a common driving system which is used for driving the ejection roller, 500, and the feeding mechanism, 220; and a power connection/disconnection mechanism for switching connection/disconnection of power transmission from the common driving system to the ejection roller, 500, or the feeding mechanism, 220, wherein they are controlled independently by controlling the power connection/disconnection mechanism.

Nakagawa teaches in Fig. 9, a common driving system, 92, like the motors used in Furuya, which is used for to separately drive elements 40 and 41, Col. 8 lines 59-62;

and a power connection/disconnection mechanism, clutch 103, for switching connection/disconnection of power transmission from the common driving system, 92, to elements 40 and 41, where they are controlled independently by controlling the power connection/disconnection mechanism, 103. It would have been obvious to one of ordinary skill in the art at the time of invention to replace the drive motor 330 of Furuya with the motor, 92, and add the clutch, 103, of Nawagawa to separately operated elements 500 and 220 of Furuya because it would eliminate the need for the additional motor reducing overall cost and minimizing the amount of power consumed.

Response to Arguments

Applicant's arguments filed 08/02/06 have been fully considered but they are not persuasive. Regarding applicant's remarks on the rejection of claims 15-20, 22, and 24-28 under 35 U.S.C. 102(b) as being anticipated by Furuya et al. (2002/009422), in paragraph (0182) lines 14-21, the CPU, 600, controls the full-cutting means, 300, and the half-cutting means, 400. The driving force, which drives full-cutting means, 300, is motor 330. Motor, 330, is connected to CPU, 600, paragraph (0179, lines 8-14) and synchronously drives the ejection roller, 510, paragraph (0166 and claim 17). Therefore the single motor, 330, controlled by the CPU, 600, causes, directly, the operation of the full-cutting means, and simultaneously, the discharge roller, 510, indirectly, through a reduction drive train, 72. The motor, 330, is engage/powerd when the length of one strip of the tape and the length of a portion of the tape for one set of print elements are determined as data setting a half-cutting position and full-cutting position, paragraph (0183), which are dependent upon the lengths of the tape between the print head and

full-cutting means, L1, and the distance between the full-cutting means and half-cutting means, L2, paragraph (0184). The CPU initiates the full-cutting means and step s109 (paragraph 0186 lines 9-15), which in turn rotates the ejection roller, independent from the feed means, based on the difference between the length of the one print data item and L2 of the tape after stopping the printing and feeding operation. Therefore, at the final full-cut based on the length of the tape, as described above, the activated motor, 330, will also ejection of the tape, based on its length.

As for the rejection of claims 21, and 23 the rejections stand for the reasons discussed above.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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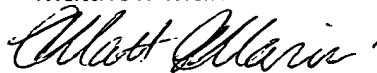
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew G. Marini whose telephone number is (571)-272-2676. The examiner can normally be reached on Monday-Friday 8:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571)-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew Marini



10/03/04



REN YAN
PRIMARY EXAMINER